

gelato
ICE

Itanium® Conference & Expo | 2006

Spotlighting Linux® on Itanium®-based Platforms

April 23-26 | San Jose, California, USA

Welcome to Gelato ICE | 2006 !



Brought to you by:

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.ORG

**Conference
Sponsors:**



ITANIUM® SOLUTIONS
A L L I A N C E





Gelato ICE Overview

- **First Open to the Public Gelato Federation Conference**
- **Outstanding Technical Program**
 - **67 Technical Presentations**
 - **8 Tracks**
 - **Integrated program on Day 3 with the Itanium Solutions Alliance Developer Days**
- **Strong Sponsorship Support**
 - **3 Conference Sponsors**
 - **2 Media Sponsors**
- **Newly added expo with 7 exhibitors**
- **Robust attendance: ~200 attendees expected**





Technical Program Presentations

Keynotes	3
General Interest	7
Enterprise	9
ISA Developers Day	6
Tools & Tuning	12
GCC	10
Scalability in a Box	4
Advanced Topics	8
Research	8

TOTAL: 67



Gelato ICE Keynotes

**Itanium
Solutions
Alliance**

William S. Worley
(CTO of Secure64 Software
Corporation)

**Itanium: It's Rationale
and Potential from an
HP Labs Perspective**

HP

Jerry Huck
(HP Fellow with HP's server
global business unit)

**Trends in Computer
System Design**

Intel

Don Soltis
(Senior Principal Engineer at
Intel)

**The Road Ahead: Intel
Itanium Architecture
and Software**

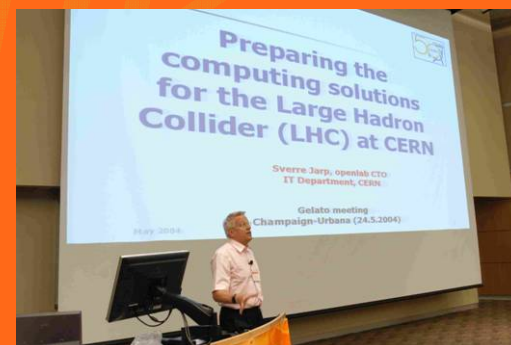
James Reinders
(Senior Engineer and Director
of Business Development and
Marketing for Intel's Software
Development Products)



Why Gelato ICE?

Advancing Linux on the Itanium Platform

- Education and Support
- Collaboration
- Community







The Community behind Gelato ICE, The Gelato Federation



Founded January 2002



Gelato is the global technical community dedicated to advancing Linux® on the Intel® Itanium® platform through collaboration, education, and leadership.



The Gelato Federation

Membership:

- Sixty members as of today (~35,000 Itanium processors at member sites world-wide)
- The Gelato Federation is a very diverse group - suppliers and users of Itanium Linux technology and solutions

Current Sponsors:

- HP (founding sponsor)
- Intel
- Itanium Solutions Alliance
- SGI
- U of Illinois (host sponsor)



ITANIUM[®] SOLUTIONS
A L L I A N C E





Gelato Membership April, 2006

65 Members, 5 Sponsors

~35,000 Itanium processors at member locations



Gelato Members are recognized Linux Itanium experts: they are respected leaders, diverse and demanding users.




5 new Gelato members

(since 10/05)


- **American University in Cairo (Egypt)**
- **Program Systems Institute – Russia Academy of Sciences (Russia)**
- **Renmin University (China)**
- **University of Minnesota (USA)**
- **Xiamen University (China)**




Gelato.org

**gelato**
ORG
Advancing Linux Itanium


About GelatoParticipantsCommunityResourcesSoftware

**gelato**
ICE
Itanium® Conference & Expo
April 23-26, 2006

**About Gelato**


What is Gelato?
The global technical community dedicated to advancing Linux® on the Intel® Itanium® platform through collaboration, education, and leadership.

Featured Flavor




The College of Engineering at the University of Illinois at Urbana-Champaign (UIUC) provides a broad base of science and fundamentals, a talented faculty, state-of-the-art research facilities, and some of the brightest students in the world.

[Learn More](#)

**Software**


- Itanium Solutions Catalog
- Virtual Machine Interface
- Handy
- OptimaNumerics Libraries
- OpenIMPACT Compiler

[More Software](#)
[Current Projects](#)
[Wishlist](#)

**Resources**

IA-64 News

- 2006.04.19 - Itanium Solutions Alliance Solution Centres Planned for Asia Pacific (*ComputerWorld Singapore*)
- 2006.04.13 - HP Integrity Server Business Shows

**Community**

Gelato ICE 2006: Itanium® Conference & Expo
April 23-26, San Jose, California

Technical Discussions
This is a technical discussion area for technical issues relating to Linux Itanium. You may also choose to participate in these discussions via email. The Gelato Federation claims no responsibility for the accuracy of items posted here. See our Terms of Service for more information.

[Create New Post](#) | [View All Posts](#)

Intercepting system call on Linux/IA64
2006.04.18 - Posted by partout@naver.com | [1 comment](#)
I have been intercepting kill syscall by using the followed stub code:

[link.S]

```
.set fp_tab_off, newcall_tab - newcall_start
.text
.global newcall_link
.proc newcall_link#
newcall_link:
.prologue 12, 46
.save ar.pfs, r47
alloc r47 = ar.pfs, 8, 9, 5, 0

.mmi
mov r48 = r1
mov r49 = r32
.save rp, r46
mov r46 = b0
.body
.mmi
mov r50 = r33
mov r51 = r34
mov r52 = r35
mov r53 = r36
;;
.mmi
```

Community Announcements

- 2006.04.11 - Cluster Resources announces certification on HP XC Clusters
- 2006.03.02 - TORQUE 2.0.0p7 Increases Usability, Reliability
- 2006.02.24 - ISA Developer Days In conjunction with Gelato ICE: Itanium® Conference & Expo, San Jose, CA, April 26-28
- 2006.02.22 - HP/Intel Joint Webcast--February 28, 2006
- 2006.02.16 - Registration Open for Gelato ICE: Itanium® Conference & Expo 2006

[Previous Announcements](#)
[Submit an Announcement](#)

Gelato-Related Websites

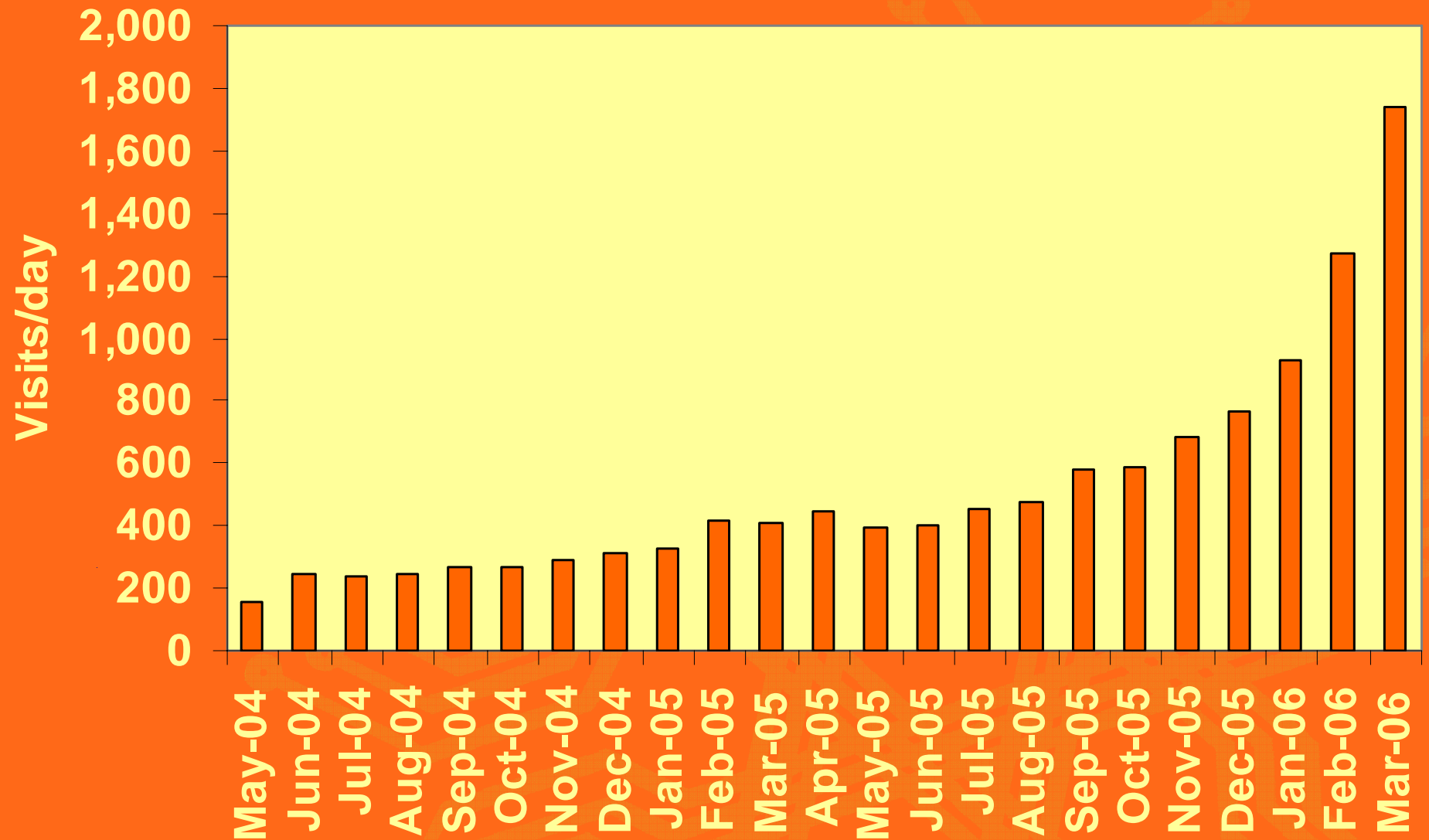
- Gelato Vanilla
- Gelato Coconut
- Gelato GCC on Itanium Workgroup Wiki
- Gelato Scalability Focus Group Wiki
- Gelato@UNSW
- OpenImpact at UIUC
- A-Star (BIT)
- INRIA's Gelato Webpage
- Gelato Waterloo
- Gelato@UPRM

Wiki Updates

- Gelato@UNSW**
2006-04-20 - MyrtoZehnder/DailyLog
2006-04-19 - PageTableInterface
2006-04-18 - PaulDavies/ToDo
2006-04-13 - ShimizuSuperPages
2006-04-11 - LocalInformation - PeterChubb/DailyToDo/2006-04-11 -



Gelato.org Daily Visits





Selected Gelato Central Operations Projects/Programs

- **Gelato Conferences, Meetings, and BOFs**
 - Gelato ICE (Itanium Conference & Expo)
 - Singapore Oct '06
 - San Jose, CA USA April/May '07
 - Munich, Germany Oct '07
 - GCC Summit Moscow Aug '06
 - BOFs – ISC 2006, SC|06
- **Gelato GCC Improvement on Itanium Project**
 - Improving performance of default Linux compiler for Itanium – <http://gcc.gelato.org>
 - Global working group incl. Intel, HP, Red Hat, Russ Acad Sci, Tsinghua Uni, U of IL, and GCC Open-source Community



Selected Gelato Central Operations Projects/Programs

- **Gelato Vanilla Project**
 - Building the Itanium application base using icc – <http://co.gelato.org/vanilla/>
 - Porting and optimizing open-source Linux applications: 7 complete, 9 in progress, 19 targeted (including Matlab open-source alternatives Octave and Scilab)
 - Partnering with PESIT India to compile target applications
- **Gelato Coconut Project**
 - Itanium resource depot – <http://co.gelato.org/coconut>
 - Providing availability to production, pre-production, and simulated Itanium HW
 - Used by Gelato Vanilla Indian partners for porting and tuning work



Selected Gelato Central Operations Projects/Programs

Gelato System Grant Program

- Granting Itanium systems for application porting and infrastructure improvement (processors supplied by Intel and systems supplied by HP)
- Awarded 34 duals and 2 quads (74 Madison processors) over 10 months
- Program migrating to Montecito-based systems in the next few months
- **Eclipse on Itanium**
 - Build system and maintenance – <http://www.eclipse.org>
 - Providing Linux Itanium builds for Eclipse Foundation using icc (working on build 3.1.2)



Thank you !

- **The Gelato Central Operations Staff**
- **The Program Committee**
- **Our Speakers who are volunteering their time**
- **Conference Sponsors (HP, Intel, and the Itanium Solutions Alliance)**
- **Exhibitors (HP, Intel, SGI, the Itanium Solutions Alliance, N-VINT, HECMS)**
- **Media sponsors (LinuxHPC.org, HPC Wire)**
- **University of Illinois (where the Gelato Central Operations team is hosted)**



**Don't miss our
next conference!**

**Gelato ICE Singapore
October 1-4, 2006**

Host Sponsor:
National Grid Office
of Singapore



Itanium Conference & Expo
Spotlighting Linux® on Itanium®-based Platforms
October 1-4 | 2006

*Mark your
calendars now
for October 1-4
in Singapore!*



Location:
Institute for Infocomm Research
21 Heng Mui Keng Terrace, Singapore

Sponsor and exhibitor opportunities available! Contact Mark K. Smith
at mksmith@gelato.org for details.

Stay tuned to www.gelato.org/meeting for more details.

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National Grid
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